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ANDREWS KURTH LLP 1350 I STREET, N.W. SUITE 1100 WASHINGTON, DC 20005			EXAMINER STEVENS, ROBERT	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/050,515

Applicant(s)

BASCOM ET AL.

Examiner

Robert Stevens

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2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-23 and 25-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-23 and 25-61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The Office withdraws the previous rejections of the claims under 35 USC § 103(a), in light of the amendment. However, the Office sets forth new rejections of the claims under 35 USC §§112-2<sup>nd</sup> paragraph and 103 (a), in light of the amendment.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-61 have been considered but are moot in view of the new ground(s) of rejection.

### ***Continued Examination Under 37 CFR 1.114***

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/16/2006 has been entered.

### ***Claim Objections***

4. **Claim 1 is objected to** because of the following informalities: Regarding claim 1: This claim is terminated with 2 (two) periods. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 1-61 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims are vague and ambiguous, and thus, their scope is indeterminable.

**Regarding independent claim 1:** First, it is unclear which “document object” is being referenced in line 18. For instance, lines 4-11 use the terminology “first and second document objects”. Lines 14-15 use the terminology “document object”. And line 16 uses the terminology “another document object”.

Second, it is also unclear which link reference is being referenced in line 20. For instance, lines 4-12 recite the creation/storage of a link relationship. Lines 13-15 recite “accessing one or more link relationships”. And lines 16-18 recite “providing a link reference”.

Thus the scope of the claim is vague and ambiguous.

**Independent claim 40** is substantially similar to claim 1, and therefore likewise rejected.

**Independent claim 21** is likewise ambiguous. For example, note that “the document object” is recited in line 18, but “first document object” and “second document object” are recited in lines 2-3, 9-10 and 12-13. It is unclear which document object is being referenced in line 18, for example.

Furthermore, lines 3-4 recite that “the relationship ... may be created ... and provided”. This language does not require creation/providing (i.e., the language is not positively recited). Thus the scope of the claim is vague and ambiguous, as it is unclear what is being claimed.

**Further regarding claims 7 and 46:** It is unclear whether the line 7 recitation of “a document object table” is different from the lines 3-4 recitation of “a document object table”.

**Claims 8 and 47** depend upon claims 7 and 46, respectively, and are therefore likewise rejected.

**Further regarding claims 15, 18, 19, 25, 39, 53, 56 and 57:** The scope of each of these claims is unclear, because there appears to be an intended limitation that is not necessarily required (i.e., it is not positively stated). The offending language is “may be”, which does not require any further limiting of the claim.

**Claims 1, 21 and 40, and other claims that depend on them,** are not patent eligible because these claims are vague and ambiguous, and thus, the scope of each is indeterminable.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1, 6-8, 16-17, 20, 40, 43, 45-48, 54-55, 58 and 60 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Dolan et al. (US Patent 5,801,702, filed Mar. 9, 1995 and issued Sep. 1, 1998, hereafter referred to as "Dolan") in view of Rivette et al. (US Patent 6,877,137, filed Dec. 7, 1999 and issued Apr. 5, 2005, hereafter referred to as "Rivette").

**Regarding independent claim 1:** Dolan teaches *A method for enabling users of a network to create, store, and provide access to relationships among document objects stored on the network, the method comprising the steps of: allowing creation of a link relationship between a first document object and a second document object, wherein the link relationship includes fields referencing a first and second document object and the allowing includes: locating the first document object; locating the second document object related to the first document object; and creating a link relationship which references the first document object and the second document object;* (See Dolan Fig. 7, showing a created data structure functioning as a link relationship among document objects linked via pointers. See #720, 722, 724 and 726. It was implied that the document objects referenced by the pointer links were first located.)

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*storing the link relationship in one or more link directories;* (See Dolan col. 11 lines 44-46, discussing navigation files. It was well known in the art that files are stored in directories.)  
*accessing one or more link relationships stored in the one or more link directories using a unique identifier for a document object, wherein the one or more link directories are separate from the document object;* (See Dolan Fig. 3 and col. 11 lines 34-50, discussing accessing via a network and the use of a navigation file including the Fig. 7 data structure functioning as a link relationship data structure.) *and providing a link reference to another document object, wherein the link reference provided is determined by identifying those one or more link relationships stored in the one or more link directories that include the unique identifier of the document object,* (See Dolan Fig. 7, esp. #720, 722, 724 and 726, showing a data structure having link relationships among documents.)

However, Dolan does not explicitly teach the further limitations as claimed. Rivette, though, discloses *wherein providing a link reference includes displaying the link reference to a user.* (See Rivette Fig. 43, showing the display of linked web page annotations.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Rivette for the benefit of Dolan, because to do so allowed a user to organize, bi-directionally link, make annotations on and maintain disparate web pages, as taught by Rivette in col. 5 lines 9-12. These references were all applicable to the same field of endeavor, i.e., linking of document objects.

**Regarding claim 6:** Dolan teaches *wherein the storing step comprises: storing a link relationship entry in a link relationship table, wherein the link relationship entry comprises fields including a first link reference to the first document object and a second link reference to the second document object; assigning link relationship attributes to the link relationship entry; and setting a directional indicator for the link relationship entry.* (See Dolan Fig. 7 showing a link relationship data structure indicating parent, child and peer attributes, and pointers to parent and child [which suggest forward and backward directions]; in context of col. 11 lines 35-55 discussing “records [i.e., table entries].)

**Regarding claim 7:** Dolan teaches *wherein the step of storing the link relationship in one or more link directories further comprises: storing the first link reference to the first document object in a document object table; assigning document object attributes to the first link reference associated with the first document object; storing the second link reference to the second document object in a document object table; and assigning document object attributes to the second link reference associated with the second document object.* (See Dolan Fig. 7 showing a link relationship data structure indicating parent, child and peer attributes, and pointers to parent and child [which suggest forward and backward directions]; in context of col. 11 lines 35-55 discussing “records [i.e., table entries].)

**Regarding claim 8:** Dolan teaches *wherein one or more of the link relationship attributes are set; and a directional indicator for the link relationship attribute is set by associating one document object attribute for the first link reference with one document object*

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*attribute for the second link reference.* (See Dolan Fig. 7 showing a link relationship data structure indicating parent, child and peer attributes, and pointers to parent and child [which suggest forward and backward directions].)

**Regarding claim 16:** Dolan teaches *assigning attributes to the link relationship established between the first document object and the second document object.* (See Dolan Fig. 7 showing a link relationship data structure indicating parent, child and peer attributes, and pointers to parent and child [which suggest forward and backward directions].)

**Regarding claim 17:** Dolan teaches *assigning attributes to a first link reference to the first document object and a second link reference to the second document object.* (See Dolan Fig. 7 showing a link relationship data structure indicating parent, child and peer attributes, and pointers to parent and child [which suggest forward and backward directions].)

**Regarding claim 20:** Dolan teaches *displaying one or more link references to document objects on the network, the displaying comprising: selecting the displayed link references for display based on a link relationship to a currently displayed document object; and filtering the displayed link references by attributes.* (See Dolan Fig. 7 showing a link relationship data structure indicating parent, child and peer attributes, and pointers to parent and child [which suggest forward and backward directions].)

**Claim 40** is directed to a machine readable medium for storing instructions, which when executed implements the method of claim 1. As such, this claim is substantially similar to claim 1, and therefore likewise rejected.

**Regarding claim 43:** Dolan teaches *wherein the allowing step comprises: a first user locating a first document object; the first user locating a second document object related to the first document object in some manner determined by the first user; and the first user creating a link relationship which references the first document object and the second document object.* (See Dolan Fig. 7 showing a data structure comprised of link relationships, in context of col. 11 lines 34-50 teaching the creation of a link relationship among several documents.)

**Claims 45-47** are substantially similar to claims 6-8 respectively, and therefore likewise rejected.

**Regarding claim 48:** Dolan teaches *selecting a link reference to a first document object related to a second document object that a second user is currently accessing, by identifying those link relationships, stored in the one or more link directories, that include a link reference to a network address of the second document object the second user is currently accessing;* (See Dolan fig. 7 in context of col. 11 lines 34-50, teaching the use of a navigation file in conjunction with a link reference data structure.)

Dolan does not explicitly teach the remaining limitations as claimed. Rivette, though, discloses *and displaying the selected link reference to the second user*. (See Rivette Fig. 43, showing the display of linked web page annotations.)

**Claims 54-55** are substantially similar to claims 16-17 respectively, and therefore likewise rejected.

**Regarding claim 58:** Dolan teaches *wherein the link relationship includes a directional indicator*. (See Dolan Fig. 7, noting parent and child pointers, which are suggestive of backward and forward directions.)

**Claim 60** is substantially similar to claim 58, and therefore likewise rejected.

9. **Claims 2-3, 14, 41-42 and 52 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Dolan et al. (US Patent 5,801,702, filed Mar. 9, 1995 and issued Sep. 1, 1998, hereafter referred to as “Dolan”) in view of Rivette et al. (US Patent 6,877,137, filed Dec. 7, 1999 and issued Apr. 5, 2005, hereafter referred to as “Rivette”) and Li (US Patent 6,725,227, provisionally filed Oct. 2, 1998 and issued Apr. 20, 2004, hereafter referred to as “Li”).

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**Regarding claim 2:** Dolan does not explicitly teach the remaining limitations as claimed. Li, though, discloses *wherein the accessing step comprises providing access only to authorized users*. (See Li at col. 1 lines 53-56, re: access control.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Li for the benefit of Dolan in view of Rivette, because to do so would have allowed users in a business environment to control access to information by individuals, projects and departments, as taught by Li in col. 1 lines 53-56. These references were all applicable to the same field of endeavor, i.e., linking of document objects.

**Regarding claim 3:** Dolan does not explicitly teach the remaining limitations as claimed. Li, though, discloses *authorizing users of the network to perform the allowing, storing and accessing steps*. (See Li at col. 1 lines 53-56, re: access control.)

**Regarding claim 14:** Dolan does not explicitly teach the remaining limitations as claimed. Li, though, discloses *wherein the one or more link directories are accessible only by a specific individual user of a client device*. (See Li at col. 1 lines 53-56, re: access control.)

**Claims 41-42 and 52** are substantially similar to claims 2-3 and 14, respectively, and therefore likewise rejected.

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10. **Claims 5 and 44 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Dolan et al. (US Patent 5,801,702, filed Mar. 9, 1995 and issued Sep. 1, 1998, hereafter referred to as “Dolan”) in view of Rivette et al. (US Patent 6,877,137, filed Dec. 7, 1999 and issued Apr. 5, 2005, hereafter referred to as “Rivette”) and Chang (US Patent No. 5,694,594, filed Nov. 14, 1994 and issued Dec. 2, 1997, hereafter referred to as “Chang”).

**Regarding claim 5:** Dolan does not explicitly teach the remaining limitations as claimed. Chang, though, discloses *wherein one or more of the steps of the method are accomplished by automated procedures not requiring interaction with the user.* (See the Chang Abstract, disclosing the automatic generation of links.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Chang for the benefit of Dolan in view of Rivette, because to do so would have allowed a user to control the generation of links as taught by Chang in col. 8 lines 61-63. These references were all applicable to the same field of endeavor, i.e., linking of document objects.

**Claim 44** is substantially similar to claim 5, and therefore likewise rejected.

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11. **Claims 9-13, 15, 18-19, 49-51, 53 and 56-57 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Dolan et al. (US Patent 5,801,702, filed Mar. 9, 1995 and issued Sep. 1, 1998, hereafter referred to as “Dolan”) in view of Rivette et al. (US Patent 6,877,137, filed Dec. 7, 1999 and issued Apr. 5, 2005, hereafter referred to as “Rivette”) and Goerz, Jr. et al. (US Patent Application Publication No. US 2002/0065671, filed Jan. 30, 2001 and claiming benefit of CIP filing date of Sep. 12, 2000, hereafter referred to as “Goerz”).

**Regarding claim 9:** Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *wherein the displayed link reference is related to a document object the user is currently accessing, wherein the link reference displayed to the user is determined by identifying those link relationships stored in the one or more link directories that include a link reference to a network address of the currently accessed document object.* See the Goerz Fig. 19I and [0095] discussing collaboration.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Goerz for the benefit of Dolan in view of Rivette, because to do so would have allowed users to archive information associated with a website, as taught by Goerz in paragraph [0084]. These references were all applicable to the same field of endeavor, i.e., linking of document objects.

**Regarding claim 10:** Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *wherein the displaying step comprises displaying more than one link reference from one or more link directories*. (See the Goerz Fig. 19I, the display of more than one company reference.)

**Regarding claim 11:** Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *wherein the displaying step comprises sorting and presenting one or more link references by the one or more link directories storing the link references*. (See Fig. 19 E, search results numbered 1-6 are sorted alphabetically and displayed.)

**Regarding claim 12:** Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *wherein the displaying step comprises sorting and presenting the one or more link references by attributes of the link relationships and link references*. (See Fig. 19 I, companies are sorted by type.)

**Regarding claim 13:** Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *wherein the method is used on one or more of: a private network, a closed network, a public network, and a private network that is connected to a public network*. (See Fig. 1 #10, showing the Internet [i.e., a public network].)

**Regarding claim 15:** Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *wherein the one or more link directories may be stored on a server connected to the network by means of a secure connection*. (See Goerz Fig. 1 #2, and the security discussions in [0037], [0013] and [0095].)

**Regarding claim 18:** Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *wherein the link relationship stored in the one or more link directories may be organized, sorted, searched and filtered by one or more attributes assigned to the link relationship*. (See Goerz Fig. 19 I, re: organize, sort, search and filter by company type.)

**Regarding claim 19:** Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *wherein the link references stored in the one or more link directories may be organized, sorted, searched and filtered by one or more attributes assigned to the link references*. (See Goerz Fig. 19 I, re: organize, sort, search and filter by company type.)

**Claims 49-51, 53 and 56-57** are substantially similar to claims 10-12, 15 and 18-19, respectively, and therefore likewise rejected.

12. **Claims 21-23, 26-27, 29-39, 59 and 61 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Dolan et al. (US Patent 5,801,702, filed Mar. 9, 1995 and issued Sep. 1, 1998, hereafter referred to as "Dolan") in view of Rivette et al. (US Patent 6,877,137, filed Dec. 7, 1999 and issued Apr. 5, 2005, hereafter referred to as "Rivette"), Goerz, Jr. et al. (US Patent Application Publication No. US 2002/0065671, filed Jan. 30, 2001 and claiming benefit of CIP filing date of Sep. 12, 2000, hereafter referred to as "Goerz") and Li (US Patent 6,725,227, provisionally filed Oct. 2, 1998 and issued Apr. 20, 2004, hereafter referred to as "Li").

**Regarding independent claim 21:** Dolan teaches *A system for establishing and providing access to relationships between document objects stored on a network wherein the relationship between a first document object and a second document object may be created by an individual user of the network and provided to other users of the network, the system comprising: one or more client devices that access document objects stored on the network and allow creation of link relationships between document objects, wherein the link relationship includes fields referencing a first and second document object and the one or more client devices allow creation of link relationships by: locating the first document object; locating the second document object related to the first document object; and creating a link relationship which references the first document object and the second document object;* (See Dolan Fig. 7, showing a created data structure functioning as a link relationship among document objects linked via pointers. See #720, 722, 724 and 726. It was implied that the document objects referenced by the pointer links were first located.) *allow access to one or more stored link relationships using a unique identifier for a document object and transmit one or more link*

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*relationships and link references to one or more user client devices, wherein the one or more stored link relationships are separate from the document object* (See Dolan col. 11 lines 44-46, discussing navigation files. It was well known in the art that files are stored in directories. See also Dolan Fig. 3 and col. 11 lines 34-50, discussing accessing via a network and the use of a navigation file including the Fig. 7 data structure functioning as a link relationship data structure.) *and the one or more servers comprise: one or more link directories that store the link relationships created on the one or more client devices;* (See Dolan Fig. 3 and col. 11 lines 34-50, discussing accessing via a network and the use of a navigation file including the Fig. 7 data structure functioning as a link relationship data structure.) *a server manager module that coordinates communication between the one or more link directories, a user directory, and the one or more client devices if those client devices are requesting services from the server;* (See Dolan Fig. 2 showing a directory hierarchy, Fig. 3 #322 showing a navigation file, and col. 11 lines 35-55 discussing the use of the link relationship data structure of Fig. 7.)

However, Dolan does not explicitly teach the further limitations as claimed. Rivette, though, discloses *and display the one or more link references to one or more users.* (See Rivette Fig. 43, showing the display of linked web page annotations.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Rivette for the benefit of Dolan, because to do so allowed a user to organize, bi-directionally link, make annotations on and maintain disparate web pages, as taught by Rivette in col. 5 lines 9-12. These references were all applicable to the same field of endeavor, i.e., linking of document objects.

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However, Dolan does not explicitly teach the remaining limitations as claimed. Li, though, discloses *and a user data store that stores information regarding authorized users of the servers and link directories*; (See Li at col. 1 lines 53-56, re: access control.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Li for the benefit of Dolan in view of Rivette, because to do so would have allowed users in a business environment to control access to information by individuals, projects and departments, as taught by Li in col. 1 lines 53-56. These references were all applicable to the same field of endeavor, i.e., linking of document objects.

Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *the use of a client-server environment* (See Goerz Fig. 1 showing a server #2 and clients 15A-n/16A-n.) *and one or more user client devices that receive one or more link references from the one or more servers* (See Goerz Fig. 1, showing a path from the sever #2 to the clients #15A-n/16A-n via the Internet #10.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Goerz for the benefit of Dolan in view of Rivette and Li, because to do so would have allowed users to archive information associated with a website, as taught by Goerz in paragraph [0084]. These references were all applicable to the same field of endeavor, i.e., linking of document objects.

**Regarding claim 22:** Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *wherein the one or more servers filter and sort the link relationships and link references before transmitting the link relationships and link references to the client devices*. (See Goerz Fig. 19E, search results numbered 1-6 are filtered/sorted alphabetically and displayed. When/where sorting - a topic in every computer science data structure class - takes place is irrelevant from a patentability standpoint.)

**Regarding claim 23:** Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *wherein the client devices filter and sort the link relationships and link references after the link relationships and link references are transmitted to the client devices from the one or more servers*. (See Goerz Fig. 19 E, search results numbered 1-6 are sorted alphabetically and displayed. When/where sorting - a topic in every computer science data structure class - takes place is irrelevant from a patentability standpoint.)

**Regarding claim 26:** Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *wherein the one or more client devices comprise: a client tool, wherein the client tool comprises a graphic user interface display;* (See Goerz [0093].) *a rendering tool that renders and displays document objects,* (See Goerz Fig. 16 C.) *the rendering tool comprising: a graphic user interface display;* (See Goerz [0100], re: screen shots.) *and a document object network address;* (See Goerz [0095], re: group collaborations and

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access to Internet resources.) *and a network access tool that connects the rendering tool and the client tool to the network.* (See Goerz [0094], re: online activities.)

**Regarding claim 27:** Dolan teaches *wherein the document object network address comprises a Uniform Resource Locator.* (See Dolan col. 12 lines 1-10, teach the use of a URN, which is suggestive of the use of a URL.)

**Regarding claim 29:** Dolan teaches *wherein the one or more link directories comprise: a link relationship table comprising a plurality of link relationship entries, the link relationship entries comprising: a first field comprising a first link reference to a first document object of the link relationship; a second field comprising a second link reference to a second document object of the link relationship; one or more link relationship attributes providing information that places the link relationship in a context useful to the user; and a directional indicator that indicates whether the link relationship between the first link reference to the first document object and the second link reference to the second document object applies in either direction or in both directions.* (See Dolan Fig. 7 showing a link relationship data structure indicating parent, child and peer attributes, and pointers to parent and child [which suggest forward and backward directions]; in context of col. 11 lines 35-55 discussing “records [i.e., table entries].)

**Regarding claim 30:** Dolan teaches *wherein the directional indicator comprises a plurality of directional indicator fields, each directional indicator field corresponding to one of the one or more link relationship attributes and indicating whether the corresponding link relationship attribute applies in one direction or in both directions between the first link reference to the first document object and the second link reference to the second document object.* (See Dolan Fig. 7, noting #720 and 730 showing links to a parent and children, which suggest backward and forward directions.)

**Regarding claim 31:** Dolan teaches *wherein the one or more link directories further comprise: a document object table comprising a plurality of link reference entries, the link reference entries comprising: a network address of the document object on the network indicated by the link reference entry wherein the unique identifier for a document object is the network address of the document object; and one or more document object attributes providing information that places the document object indicated by the link reference entry in a context that is useful to the user.* (See Dolan Fig. 7, showing a plurality of pointers which link to a parent, children and peer documents, and a URN. The placement of a pointer in the field for a parent, for example, is suggestive of a parent attribute.)

**Claim 32** is substantially similar to claim 27, and therefore likewise rejected.

**Regarding claim 33:** Dolan teaches *wherein the link reference entries further comprise a listing of all link relationship entries in which the network address of the document object indicated by the link reference entry is present in the first field or the second field of the link relationship entries*. (See Dolan Fig. 7, showing parent/children/peer link reference fields.)

**Claim 34** is substantially similar to claim 27, and therefore likewise rejected.

**Regarding claim 35:** Dolan teaches *wherein a network address of the document object on the network includes information necessary to specify the location of the document object on the network*. (See Dolan Fig. 7, showing a URN.)

**Claim 36** is substantially similar to claim 27, and therefore likewise rejected.

**Claim 37** is substantially similar to claim 13, and therefore likewise rejected.

**Regarding claim 38:** Dolan does not explicitly teach the remaining limitations as claimed. Li, though, discloses *wherein the one or more link directories are accessible only by a specific individual user of a client device*. (See Li at col. 1 lines 53-56, re: access control.)

**Regarding claim 39:** Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *wherein the one or more link directories may be stored on a*

*server connected to the network by means of a secure connection.* (See Goerz Fig. 1 #2, and security discussions in [0037], [0013] and [0095].)

**Regarding claim 59:** Dolan teaches *wherein the link relationship includes a directional indicator.* (See Dolan Fig. 7, noting parent and child pointers, which are suggestive of backward and forward directions.)

**Regarding claim 61:** Dolan does not explicitly teach the remaining limitations as claimed. Goerz, though, discloses *wherein the one or more client devices include one or more user client devices.* (See Goerz fig. 1 #16A-n and 15A-n, showing client devices and corresponding users.)

13. **Claims 25 and 28 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Dolan et al. (US Patent 5,801,702, filed Mar. 9, 1995 and issued Sep. 1, 1998, hereafter referred to as “Dolan”) in view of Rivette et al. (US Patent 6,877,137, filed Dec. 7, 1999 and issued Apr. 5, 2005, hereafter referred to as “Rivette”), Goerz, Jr. et al. (US Patent Application Publication No. US 2002/0065671, filed Jan. 30, 2001 and claiming benefit of CIP filing date of Sep. 12, 2000, hereafter referred to as “Goerz”), Li (US Patent 6,725,227, provisionally filed Oct. 2, 1998 and issued Apr. 20, 2004, hereafter referred to as “Li”) and Chang (US Patent No. 5,694,594, filed Nov. 14, 1994 and issued Dec. 2, 1997, hereafter referred to as “Chang”).

**Regarding claim 25:** Dolan does not explicitly teach the limitations as claimed. Goerz, though, discloses *wherein the user data store comprises: a user directory, the user directory comprising one or more user data records containing personal identifying information and information regarding which of the one or more link directories and the one or more servers a user may be authorized to access;* (See Goerz paragraph [0057], especially re: user account.) *a user profile store, the user profile store comprising one or more user profile records each containing one or more user profiles for each authorized user of the servers and link directories;* (See Goerz paragraph [0057], especially re: user account.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Goerz for the benefit of Dolan in view of Rivette and Li, because to do so would have allowed users to archive information associated with a website, as taught by Goerz in paragraph [0084]. These references were all applicable to the same field of endeavor, i.e., linking of document objects.

Additionally, Dolan does not explicitly teach the remaining limitations as claimed. Chang, though, discloses *and a user account store, the user account store comprising one or more user account records each containing usage data for each authorized user of the servers and link directories.* (See the Chang Abstract, disclosing the use of a user profile.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Chang for the benefit of Dolan in view of Rivette, Goerz and Li, because to do so would have allowed a user to control the generation of links as taught by Chang in col. 8 lines 61-63. These references were all applicable to the same field of endeavor, i.e., linking of document objects.

**Regarding claim 28:** Dolan does not explicitly teach the limitations as claimed. Goerz, though, discloses *wherein the client device further comprises one of: one or more link directories that store the link relationships;* (See Goerz paragraph [0071], re: supercategories and subcategories.) *a communications module that coordinates communication between the one or more link directories, a user directory, a database of user profile data, and the one or more client devices.* (See Goerz paragraph [0069] re: content management tool and an indexed knowledge base 38, which is used in conjunction with the content management tool, and paragraph [0057] re: user account on Website; in context of Fig. 1 #16A-n/15A-n clients.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Goerz for the benefit of Dolan in view of Rivette and Li, because to do so would have allowed users to archive information associated with a website, as taught by Goerz in paragraph [0084]. These references were all applicable to the same field of endeavor, i.e., linking of document objects.

Additionally, Dolan does not explicitly teach the remaining limitations as claimed. Chang, though, discloses *and a user data store that stores information regarding authorized users of the client tool.* (See the Chang Abstract, disclosing the use of a user profile.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Chang for the benefit of Dolan in view of Rivette, Goerz and Li, because to do so would have allowed a user to control the generation of links as taught by Chang in col. 8 lines 61-63. These references were all applicable to the same field of endeavor, i.e., linking of document objects.

### **Conclusion**

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

#### **Non-Patent Literature**

Greer, Jim E., et al., "Guided Navigation Through Hyperspace", 8<sup>th</sup> World Conference of the AIED Society, Kobe, Japan, Aug. 18-22, 1997, pp. 1-6 (downloaded from:

[web.archive.org/web/19991008091416/http://www.contrib.andrew.cmu.edu/~plb/AIED97\\_workshop/Greer.html](http://web.archive.org/web/19991008091416/http://www.contrib.andrew.cmu.edu/~plb/AIED97_workshop/Greer.html)).

Chakrabarti, Soumen, et al., "Memex: A browsing Assistant for Collaborative Archiving and Mining of Surf Trails", Proceedings of the 26<sup>th</sup> VLDB Conference, Cairo, Egypt, Sep. 10-14, 2000, pp. 604-606.

Carr, Leslie A., et al., "Web Links as User Artefacts", Univ. of Southampton Technical Report, ©1996, pp. 1-12 (downloaded from: [eprints.ecs.soton.ac.uk/862/02/html/](http://eprints.ecs.soton.ac.uk/862/02/html/)).

Oinas-Kukkonen, Harri, "Embedding Hypermedia into Information Systems", Proceedings of the 30<sup>th</sup> Annual Hawaii International Conference on System Sciences (HICSS), Vol. 6: Digital Documents, © 1997, pp. 187-196.

#### **US Patents**

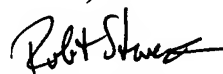
Bates et al	6,184,886
Bakke et al	6,016,498
Hsu et al	6,970,867
Li et al	6,631,496
Bauersfeld	5,917,491
van Hoff	5,822,539

*Contact Information*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

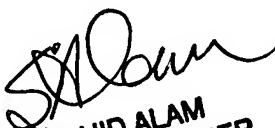
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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June 1, 2007



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